Amendments to the claims:

Please substitute the following pending claims 3, 4, 14, 15, 18-22, 29, 30, 34, 36, 40 and 51-70 as replacement claims for the previously-pending claims. In this Amendment A, claims 3, 4, 14, 15, 18-22, 29, 30, 34, 36 and 40 have been amended, claims 1,2, 5-13, 16, 17, 23-28, 31-33, 35, 37-39 and 41-50 have been canceled, and new claims 51-70 have been added.

1-2. (canceled)

3. (currently amended) A pharmaceutical composition comprising core-shell particles, ~~wherein~~ said core-shell particles comprising ~~comprise~~ a core component and a shell component, the core component comprising a potassium-binding cation exchange polymer, the shell component comprising a crosslinked polymer having a permeability for potassium ion that is higher than the permeability for a competing cation, and having a thickness ranging from about 0.002 microns to about 50 microns ~~said particles binding in an animal subject a greater amount of an inorganic ion in the presence of said shell component compared to the amount of inorganic ion bound in the absence of said shell component and retaining a significant amount of said bound inorganic ion during a period of therapeutic and/or prophylactic use, wherein said inorganic ion is an cation~~.

4. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 or 53 wherein said core-shell particles have a capacity for binding potassium ion and retaining a significant amount of the bound potassium ion during a period of residence in a gastrointestinal tract of a human subject ~~component binds a greater amount of an inorganic ion in the presence of said shell component compared to the amount of inorganic ion bound in the absence of said shell component~~.

5-13. (canceled)

14. (currently amended) The pharmaceutical composition of claim 3 ~~claim 10~~ wherein said permeability of said shell component polymer to said potassium ~~inorganic~~ ion is independent of said permeability of said shell component to said competing cation ~~solute~~.

15. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 wherein said core component is physically or chemically attached to said shell component.

16-17. (canceled)

18. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 wherein said shell component polymer exhibits greater interaction with said competing cation ~~solute~~ compared to said potassium ~~inorganic~~ ion.

19. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 wherein said shell component polymer repels said competing polymer ~~solute~~ by ionic interaction.

20. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 wherein said shell component polymer has a thickness ranging from ~~is~~ about 0.005 μm ~~1nm~~ to about 20 μm ~~50 μm thick~~.

21. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 wherein said core-shell particle is about 200 nm to about 2 mm in size.

22. (currently amended) The pharmaceutical composition of claim 3 or 21 wherein said shell component polymer has a thickness ranging from about 0.005 μm to about 20 μm ~~core-shell particle is about 500 μm in size~~.

23-28. (canceled)

29. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 wherein said shell component is deposited with a coating process.

30. (currently amended) The pharmaceutical composition of claim ~~1 or~~ 3 or 53 wherein said pharmaceutical composition further ~~shell component~~ comprises an enteric coating.

31-33 (canceled)

34. (currently amended) A method of treating an animal subject, comprising administering to an animal subject in need thereof an effective amount of the pharmaceutical composition of claim ~~1 or~~ 3 or 53.

35. (canceled)

36. (currently amended) The method of claim 34 ~~claim 35~~ wherein said animal subject is suffering from a disease selected from the group consisting of ~~hyperphosphatemia, hypocalcemia, hyperparathyroidism, depressed renal synthesis of calcitriol, tetany due to hypocalcemia,~~ renal insufficiency, renal failure, ~~ecotopic calcification in soft tissues, and~~ end stage renal disease (ESRD) and combinations thereof.

37-39. (canceled)

40. (currently amended) The method of claim 34 ~~claim 39~~ wherein said animal subject is suffering from ~~at least one of~~ hyperkalemia~~, metabolic acidosis, renal insufficiency, or anabolic metabolism~~.

41-50. (canceled)

51. (new) The invention of claim 3 or 21 wherein said shell component polymer has a thickness ranging from about 0.005 μm to less than about 10 μm.

52. (new) The invention of claim 3 or 21 wherein said shell component polymer has a thickness ranging from more than about 1 μm to less than about 10 μm.

53. (new) A pharmaceutical composition comprising core-shell particles, said core-shell particles comprising a core component and a shell component, the core component comprising a potassium-binding cation exchange polymer, the shell component comprising a crosslinked polymer having a permeability for potassium ion that is higher than the permeability for a competing cation, the weight ratio of the shell component polymer to the core component polymer ranging from about 0.0001:1 to about 0.5:1.

54. (new) The pharmaceutical composition of claim 53 wherein the weight ratio of the shell component polymer to the core component polymer ranges from about 0.002:1 to about 0.1:1.

55. (new) The invention of claim 3 or 53 wherein the core component comprises a crosslinked cation-exchange polymer.

56. (new) The invention of claim 3 or 53 wherein the core component comprises a cation-exchange polymer comprising acidic functional groups.

57. (new) The invention of claim 3 or 53 wherein the core component comprises a cation-exchange polymer comprising functional groups selected from the group consisting of carboxylate, phosphonate, sulfate, sulfonate, sulfamate and combinations thereof.

58. (new) The invention of claim 3 or 53 wherein the shell component comprises a crosslinked synthetic polymer.

59. (new) The invention of claim 3 or 53 wherein the shell component comprises an ethylenic polymer.

60. (new) The invention of claim 3 or 53 wherein the shell component comprises a vinylic polymer.

61. (new) The invention of claim 3 or 53 wherein the shell component comprises a crosslinked vinylic polymer.

62. (new) The invention of claim 3 or 53 wherein the shell component is essentially not disintegrated during the period of residence of the core-shell particles in the gastro-intestinal tract.

63. (new) The invention of claim 4 wherein the core-shell particles retain at least about 50% of the bound potassium ion with the core-shell particles for the period of residence of the core-shell particles in the gastro-intestinal tract.

64. (new) The invention of claim 4 wherein the core-shell particles retain at least about 75% of the bound potassium ion with the core-shell particles for the period of residence of the core-shell particles in the gastro-intestinal tract.

65. (new) The invention of claim 4 wherein the core-shell particles selectively bind potassium ion over the competing cation during the period of residence of the core-shell particles in the gastro-intestinal tract.

66. (new) The invention of claim 4 wherein the human subject is suffering from renal insufficiency.

67. (new) The invention of claim 4 wherein the human subject is suffering from renal failure.

68. (new) The invention of claim 4 wherein the human subject is suffering from end stage renal disease (ESRD).

69. (new) The invention of claim 4 wherein the human subject is a dialysis patient.

70. (new) The invention of claim 4 wherein the human subject is suffering from hyperkalemia.

[NO FURTHER ENTRIES THIS PAGE]